

plumage has a mottled appearance, caused by the feathers being centrally black and broadly edged with cinereous. In the middle of the back is a perceptibly greenish gloss. The only examples I have seen of this as of the former species are in the British Museum, where Mr. G. R. Gray's uniform kindness affords me every opportunity of studying the collection under his care.

MISCELLANEOUS.

Bohemian Forests and Peat-bogs. By Dr. HOCHSTETTER*.

THE primitive forests on Prince Schwarzenberg's domain, viz. at Krumau, Winterberg, and Stubenbach, may at a considerable distance be easily distinguished from the cultivated and regularly cut forests by their irregular and angular outlines; whilst the cupola-shaped summits of the firs rise considerably above the pyramidal pine-tops. Seen from an elevation, the difference between the primitive forest, with its withered tops and somewhat scattered trees, and the compact and verdant cultivated forest, is still more striking.

In some localities in the interior of the forests, the trees stand in straight lines of 150 to 200 feet [= 155·55 to 207·4 English feet] in length, as if planted so. Wherever the seeds do not find in the deep vegetable soil a site favourable for germination, their growth is exclusively confined to the roots and prostrate stems in a state of decomposition. Long after these stems have completely rotted away, their original length and situation are visible from the rectilinear arrangement of the younger trees, growing in the mouldering substance of the decayed veterans. This growth of the young plant on the decaying roots and stems serves also to explain the frequent occurrence of trees supported above the ground by means of exposed columnar roots, and, as it is termed, "standing on stilts."

The age of the pines and the firs in the primitive forests reaches as much as 300 to 500 years; the pines grow occasionally to 200 feet in height, and contain 1900 cubic feet [= 2118·5 English cubic feet] of wood in their stem alone. One of the finest of the firs, 30 feet [= 31·11 English feet] in circumference at a man's height, stood in the Brandelwald, near Unter-Mulldau; it was lately blown down, and it is estimated to contain 30 klafters [= 3012·03 English cubic feet] of fire-wood. Besides pines and firs, the forests in question contain beeches, maples, elms, birches, willows, and some, but very few, yew trees.

At present the extent of Prince Schwarzenberg's primitive forests is estimated at 30,000 Austrian acres [= 42,560 English acres]; and the quantity of wood in them at 6½ millions of klafters [= 652,606,500 English cubic feet]. A large portion of the wood from these forests is consumed in the neighbourhood for the use of the glass-furnaces,

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and for the fabrication of musical instruments and touchwoods; but the major part is floated to the lower countries for timber and for fuel. Large quantities of the timber are sent annually to England and Hamburg for ship-building.

Rapacious animals, as bears, wolves, and lynxes, were formerly very abundant in the Böhmer-Wald, but have been exterminated. A bear, the last of its race, is supposed to be still haunting the Jokuswald, near Salnau.

The beds of peat or bituminous turf, locally denominated "Auen" or "Filze," may be considered in connexion with these old forests. The whole upper part of the Moldau Valley, as far up as the neighbourhood of Ferchenhaid, for an extent of 7 Austrian miles [= 32.998 English miles], and with an average breadth of $\frac{1}{4}$ Austrian mile [= 1.178 English mile], is one continuous peat-bed, traversed by the windings of the Moldau, whose waters assume a brownish tint by dissolving the extractive substances of the peat.

In the mountainous parts the peat-deposits are more isolated, amid surrounding forests. The dense vegetation of pumilous birches and pines covering their surfaces attests their antiquity, and points to their analogy with the primitive forests. Lakes occur in the centre of the peat-beds near Innergefeld and Ferchenhaid. A swimming island, probably owing its origin to the central swelling and bursting of the peat, is seen in the last-named locality.

Cultivation is busy converting the peat-beds into forests, meadows, and arable-fields. These deposits, however, are of great importance in the economy of nature, and it may become a question of national economy how far this cultivation may proceed without injurious consequences. The climatal and meteorological influence of the peat-beds is the same as that of the forests; they even act with more energetic and concentrated effect. By acting as natural sponges in periods when water is abundant, they attract the superfluous humidity, and so prevent inundations. In seasons of drought they give up their accumulated waters. They are the real water-reservoirs in mountainous regions; generally giving rise to the rivulets and rivers, and keeping their water-level constant during every season.

OCCURRENCE OF *DIODONTA FRAGILIS* AT WEYMOUTH.

To the Editors of the *Annals of Natural History*.

Weymouth, October 23, 1855.

GENTLEMEN,—I beg to record Weymouth as a habitat for that very local Mollusk, *Diodonta fragilis*, having some short time since picked up a living specimen on the sands in front of the Esplanade. It measures $1\frac{1}{8}$ inch in width, and is in excellent condition. I should have announced it before, but the fact was, it had been placed in a drawer with other shells to be examined, and I was not aware of the prize I possessed until it was pointed out by my friend Mr. H. Adams.